

Appl. No. 10/023,373

Reply to Office Action of August 11, 2005

REMARKS

Claims 1-20 were presented for examination, and claims 1-20 are rejected. While Examiner refers to a claim 21, no such claim was originally submitted. Claims 1, 9, and 10 have been amended, claim 19 has been canceled, and a new claim 21 has been added. After entry of these amendments, claims 1-18, 20, and 21 remain in the application. Reconsideration is respectfully requested in view of the foregoing amendments and following remarks. These amendments and following remarks are believed to be fully responsive to the Office Action dated August 11, 2005 ("the August Office Action"), and also render all currently pending claims at issue patentably distinct over the references of record.

**I. REJECTION OF APPLICANTS' INDEPENDENT CLAIMS 1, 9, AND 21 UNDER 35 U.S.C. § 103**

Examiner rejects claims 1-21 under 35 U.S.C § 103(a) as being unpatentable over Price R-W et al. (US Patent No. 6,052,068) in view of Smith (US Patent No. 5,105,179). In paragraph 2 of the August Office Action, Examiner specifically rejects claims 1, 9, and 21 stating that Price R-W et al. teaches a method for identifying and registering a vehicle that comprises:

(1) "receiving and storing vehicle identification and registration information in a remote control unit (a vehicle),"

(2) "transferring the vehicle identification and registration information in the remote control unit (a vehicle) to the vehicle (a police car, interrogator) by wireless transmission (radio frequency)," and

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(3) "comparing the information stored in the remote control unit with data stored in the vehicle."

Though conceding that Price R-W et al. does not teach displaying at least a portion of the information on an electronic license plate, Examiner goes on to state that the Smith reference teaches "displaying at least a portion of the vehicle identification and registration information on an electronic license plate" and, therefore, that it would have been obvious to incorporate the electronic license plate of Smith into the vehicle identification system of Price R-W et al. because a combination of Smith's electronic license plate and Price R-W et al.'s system would enable users to change information on the license plate wirelessly.

Before embarking on a detailed discussion of Examiner's rejection of the claims, Applicants believe that it would be helpful to briefly describe their invention. Applicants' inventive method and system for identifying and registering a motor vehicle includes transmitting identification information pertaining to the vehicle from an authorized agency (e.g., the Department of Motor Vehicles ), storing this information in a smart chip that may be housed in a remote control unit (e.g., a keyfob of the type that is normally used to lock and unlock vehicle doors, the trunk, the ignition, etc.), transferring this information to a computer on the vehicle, and displaying at least a portion of the identification information pertaining to the vehicle on a license plate mounted on the vehicle. In a preferred embodiment, a computer on the vehicle interrogates the remote control unit, and the smart chip contained within the unit informs the vehicle of the identification information stored therein. The computer then compares the identification information provided by the smart chip to information stored in an onboard memory and, if the information does not correspond, the computer uploads the information from the remote control thereby updating the onboard identification information.

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Additionally, in a further embodiment, the computer may be programmed to perform a number of actions if the identification information stored in the remote control unit does correspond to that stored onboard the vehicle (e.g., unlock a vehicle door).

***Price R-W et al. does not teach receiving and storing vehicle identification and registration information in a remote control unit.***

Examiner suggests that Applicants' remote control unit corresponds to a vehicle or vehicles 18 shown in Figure 1 of Price R-W et al. However, Applicants explicitly state that the remote control unit may take either of two exemplary forms: (1) a fob (e.g., a keyfob that is an integral part of the ignition key and normally utilized to lock/unlock vehicle doors, a trunk, an ignition, etc.) (page 5, lines 19-23), or (2) a smart card (page 5, lines 23-27). In view of this, it should be clear that Applicants' remote control unit contemplates a portable unit that may be carried by a driver of the vehicle. To conclude that Applicants' remote control unit is anticipated by a vehicle as Examiner suggests is giving Price R-W et al. credit for much more than they invented.

***Price R-W et al. does not teach transferring the vehicle identification and registration information in the remote control unit to the vehicle to which the information pertains.***

Applicants' independent claims 1 and 9 have been amended to specifically recite that the remote control unit receives and stores identification and registration information that pertains to a vehicle to be identified. Examiner suggests that the vehicle which receives identification and registration information from the remote control unit corresponds to an interrogator, such as a police car, shown at 25 in Figure 2 of Price R-W et al. However, the vehicle receiving the information in Price R-W et al. is not the vehicle that is in fact identified by the information

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being transferred. Instead, in Price R-W et al., the transferred information identifies the vehicle that is transmitting the information (i.e., the vehicle that Examiner has identified as Applicants' remote control unit). Thus, Price R-W et al. teaches transferring information identifying a sending vehicle, while Applicants' claims 1 and 9 recite transferring information identifying the receiving vehicle.

***The identification and registration information pertaining to the vehicle is not displayed on the vehicle's electronic license plate.***

Applicants' amended claims 1 and 9 make it clear that (1) the information received by the remote control unit and transferred to the vehicle identifies and pertains to that specific vehicle, and that (2) a portion of that information is displayed on an electric license plate. In this manner, the vehicle is identified. If it is true that Applicants' remote control unit corresponds to the vehicle in Price R-W et al. as suggested by Examiner, and that Applicants' vehicle corresponds to the police vehicle in Price R-W et al. as also suggested by Examiner, then the logical conclusion is that the identification and registration information in Applicants' remote control is displayed on an electronic license plate attached to the police car. Obviously, this would result in the police vehicle being identified by incorrect data and thus render the system inoperable. This would also not result in current vehicle identification and registration information being transferred to the vehicle in question (identified by Examiner as vehicle 18 in Price R-W et al.). While it is true that the Smith reference discloses a digital license plate, nowhere is it suggested in either Price R-W et al. or the Smith reference that the a digital license plate disclosed by Smith could be combined with the system described by Price R-W et al. and yield an operative arrangement. In conclusion, it is respectfully submitted that amended

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independent claims 1 and 9 are neither anticipated nor rendered obvious by Price R-W et al. and Smith taken singly or in valid combination.

Applicants' rejection of claim 21 is considered moot since no claim 21 was originally provided.

## II. REJECTION OF APPLICANTS' DEPENDENT CLAIMS 2 - 8 AND 10 - 20 UNDER 35 U.S.C. § 103

In paragraph 3 of the Office Action, Examiner states that, with respect to claim 2, Price R-W et al. teaches a method for identifying or registering a vehicle wherein the step of receiving includes downloading vehicle identification and registration information from an authorizing agency's database to a customer's personal computer. Examiner refers to column 6, lines 45-50 of Price R-W et al., which states that:

*...processor 31 performs decoding and de-interleaving of the data message received from the de-encryptor 42 then displays the received vehicle registration data on the input/output 30 to the authorized operator. The operator may elect to establish a connection to a remote computer database server through a computer input/output 52.*

As can be seen, nowhere does the portion of Price R-W et al. cited by Examiner disclose the downloading of vehicle identification and registration information from an authorizing agency's database to a customer's personal computer. The Smith reference also does not provide any teaching or suggestion of this feature. Therefore, Applicants' claim 2, which is believed to properly depend from Applicants' amended independent claim 1, is believed allowable.

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In paragraph 4 of the Office Action, Examiner rejects Applicants' claim 3 and states that Price R-W et al. teaches a method for identifying and registering a vehicle wherein the downloading includes transmitting the vehicle identification and registration information to a personal computer over the internet. In support of this, Examiner again refers to column 6, lines 45-50 of Price R-W et al. As previously stated, neither the Price R-W et al. reference nor the Smith reference teaches downloading vehicle identification and registration information from an authorizing agency's database to a personal computer. Therefore, Applicants' dependent claim 3, which is believed to properly depend from Applicants' amended claim 1, is believed allowable.

In paragraph 5 of the Office Action, Examiner states that, with respect to claim 4, Price R-W et al. teaches a method that includes transmitting credit card information to an authorizing agency to pay a fee associated with receiving vehicle identification and registration information. In particular, Examiner cites column 3, lines 63-67 of Price R-W et al. as teaching "a method for identifying and registering a vehicle, further including transmitting credit card information to the authorizing agency to pay a fee associated with receiving the vehicle identification and registration information." In fact, this section of Price R-W et al. reads "...if data in the less secure portion comprises prepaid tolls, the interrogator can deduct toll charges from the data and rewire the less secure layer with a new credit balance." As can be seen, this portion of Price R-W et al. discusses a debiting process wherein toll charges are automatically deducted from a prepaid credit balance, which is dedicated to paying such toll charges. This portion of Price R-W et al. does not teach transmitting *credit card information*... to pay a fee associated with *receiving* identification and registration information as recited in Applicants' dependent claim

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4. Therefore, it is respectfully submitted that dependent claim 4, which indirectly depends from Applicants' amended independent claim 1, is allowable.

In paragraph 6 of the Office Action, Examiner states that, with respect to claim 10, Price R-W et al. teaches a method for identifying and registering a vehicle wherein said remote control unit is a fob. Examiner specifically refers to Figures 1 and 2. It is respectfully submitted that Price R-W et al. does not teach or suggest the use of a fob in Figures 1 and 2 or in any description of these figures. Instead, Figures 1 and 2 merely illustrate a plurality of vehicles (18) equipped with a plurality of vehicle ID tags (16) that are each mounted in their respective vehicle. Furthermore, Examiner has previously stated that Applicants' remote control unit corresponds to the vehicle in Price R-W et al. To consider the vehicle of Price R-W et al. a fob is clearly beyond the scope any reasonable construction of the term "fob," which is typically considered to be a type of security token or a small hardware device having built-in authentication mechanisms. Such a construction would also be inconsistent with *Webster's 9<sup>th</sup> New Collegiate Dictionary*, which defines a "fob" as (1) a watch pocket; (2) a short strap, ribbon, or chain attached especially to a pocket watch; or (3) an ornament attached to a fob chain. Considering this, and further considering that Applicants' independent claim 10 is believed to properly depend from Applicants' independent claim 9, claim 10 is believed allowable. It should be noted that claim 10 has been amended to correct a grammatical error.

In paragraph 7 of the Office Action, Examiner states that, with regard to claim 11, Price R-W et al. teaches a method for registering and identifying a vehicle wherein the remote control unit is a smart card. In support of this, Examiner refers to column 4, lines 60-64. Applicants

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find this somewhat confusing since Examiner has previously suggested that Applicants' remote control unit corresponds to a vehicle 18. This aside, Applicants' dependent claim 11 is believed to properly depend from Applicants' independent claim 9 and is thus believed allowable therewith.

In paragraphs 8, 9, and 10 of the Office Action, Examiner rejects claims 12, 13, and 14, respectively, for reasons already discussed. Since these claims are believed to properly depend, either directly or indirectly, from Applicants' amended independent claim 9, they are believed allowable therewith.

In paragraph 11 of the Office Action, Examiner states that, with respect to claim 15, Price R-W et al. teaches a method for identifying and registering a vehicle wherein at least one computer includes a comparator for comparing vehicle identification and registration information being received from the remote control unit with that stored in the at least one computer for updating that computer if the vehicle identification and registration information is new. Examiner refers to column 4, lines 15-21 of Price R-W et al., which recites in relevant part that the interrogator 12 allows authorized law enforcement officers to compare the stored registration information in interrogator 12 with computer databases to determine if grounds exist to investigate the vehicle or its occupants. Thus, while this portion of Price R-W et al. does discuss a certain comparing step, this step is performed by authorized law enforcement officers in furtherance of an investigation. Furthermore, Price R-W et al. does not suggest that old information is updated with new information. Considering this, and considering that claim



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15 is believed to properly depend from Applicants' amended independent claim 9, Applicants' claim 15 is believed allowable.

In paragraphs 12, 13, 14, 15, and 16 of the Office Action, Examiner rejects claims 16, 17, 18, 19, and 20, respectively, for reasons already advanced. Since claims 16, 17, 18, and 20 are believed to properly depend, either directly or indirectly, from Applicants' amended independent claim 9, they are believed allowable therewith. Claim 19 has been cancelled.

In paragraph 18 of the Office Action, Examiner rejects claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Price R-W et al. in view of Smith taken further in view of Murakami et al. While the Murakami et al. reference describes a vehicle subsystem for unlocking a vehicle, this reference does not supply the deficiencies pointed out above with respect to the Price R-W et al. and Smith references. Therefore, as claim 6 is believed to properly depend from Applicants' amended independent claim 1, it is respectfully submitted that this claim is allowable therewith.

In paragraph 19 of the Office Action, the Examiner states that, with respect to claim 7, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the vehicle unlock system of Murakami et al. into the vehicle identification system of Price R-W et al. because the combination of Murakami's system and the Price R-W et al. system would allow user access to the vehicle in situations where the user lost the vehicle's keys. However, Murakami et al. makes no suggestion of unlocking an ignition system of the vehicle if the vehicle identification and registration information matches the data stored in the

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vehicle as is specifically recited by Applicants' dependent claim 7. Instead, the Murakami et al. reference states that if a legitimate user enters the wrong pin more than an allowed number of times, fails to enter the information within a preset time period, or loses a car key, or locks the car key inside the vehicle, certain safety measures may be implemented. Murakami et al. does not suggest that access is denied due to a mismatch between stored information in the vehicle and that being transmitted by a remote control unit. Considering this, and considering that Applicants' claim 7 is believed to properly depend from Applicants' amended independent claim 1, Applicants' claim 7 is believed allowable.

Examiner next rejects claims 5 and 8 under 35 U.S.C § 103(a) as being unpatentable over Price R-W et al. in view of Smith, taken further in view of Gehlot et al. While the Gehlot et al. reference teaches that information stored on a license plate may be dynamically updated, it does not supply the deficiencies pointed out above with respect to the Price R-W et al. and Smith references. Since Applicants' dependent claims 5 and 8 are believed to properly depend from allowable independent claims, claims 5 and 8 are believed allowable therewith.

### **III. EXAMINER'S BURDEN OF ESTABLISHING A PRIMA FACIE CASE OF OBVIOUSNESS UNDER 35 U.S.C. § 103**

Examiner has the burden of proving factual support for any prima facie conclusion of obviousness. To reach a proper determination of obviousness under 35 U.S.C. § 103, Examiner is required to step back in time and determine that the claimed invention, as a whole, would have been obvious to a person of ordinary skill in the art just before the invention was made. Examiner cannot rely on Applicants' disclosure to reach this determination. Impermissible

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hindsight must be avoided, and the conclusion of obviousness reached on the basis of facts and the prior art.

Examiner is well aware of the three basic criteria necessary to establish a prima facie case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference or references must teach or suggest all the claim limitations. The teaching or suggestion to make the combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. In *Re Vaeck*, 947 Fed. 2d 488, 20 USPQ 2d, 1438 (Fed. Cir. 1991). It is known that the rationale to modify the prior art does not have to be expressly stated in the prior art, but may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law; however, Examiner must present a convincing line of reasoning supporting the rejection.

Here, there is no suggestion or motivation in the cited references that renders the elements of Applicants' claims, as amended, obvious. As explained above, the Price R-W et al. reference, which is the primary reference upon which Examiner relies, does not teach multiple elements claimed by Applicants' including: (1) displaying identification and registration information on the vehicle's electronic license plate, (2) transferring the vehicle identification and registration information in the remote control unit to the vehicle to which the information pertains, and (3) receiving and storing vehicle identification and registration information in a remote control unit. As further explained above, these claimed limitations are also not taught by any of the other cited references. As Examiner has given no indication that these limitations

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are impliedly contained in the prior art or that they may be reasoned from knowledge generally available to the skilled practitioner or established by scientific principles or legal precedent. Applicants respectfully submit that Examiner has not established a prima facie case of obviousness.

#### **IV. APPLICANTS' NEWLY ADDED INDEPENDENT CLAIM 21**

A new independent claim 21 has been added that claims an identification and registration information system for use on a vehicle comprising: (1) a keyfob for receiving, storing, and transmitting identification and registration information pertaining to a vehicle; (2) at least one computer deployed on the vehicle for wirelessly receiving and storing that information; and (3) an electronic license plate mounted on the vehicle and coupled to the computer for displaying at least a portion of that information. For reasons described above, it is respectfully submitted that the Price R-W et al., Smith, Murakami et al., and Gehlot et al. references, taken singularly or in valid combination, do not teach or suggest such a structure. Therefore, Applicants' new independent claim 21 is believed to distinguish over the cited references and is therefore allowable.

#### **V. CONCLUSION**

Applicants respectfully submit that the above identified application as amended is now in condition for allowance and earnestly request such allowance. Should the Examiner have any questions or wish to discuss the foregoing response and amendment, Applicants request that Examiner contact the undersigned at 313-665-4969.

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If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this Response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension of time for the required time period and/or authorization to charge Deposit Account No. 07-0960 for any fee which may be due.

Respectfully submitted,

Dated: 11-21-05

By:   
Christopher DeVries